

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An electroluminescent (EL) display device comprising an array of display pixels, each display pixel comprising an EL display element and a current source circuit for driving a current through the EL display element in dependence on a data voltage, wherein the display device is operable in at least first and second phases within each frame period:

the first phase having a first duration and during which a first one of a first plurality of drive currents can be driven through the EL display element; and

the second phase having a second duration, different to the first duration, and during which a second one of a second plurality of drive currents can be driven through the EL display element, wherein the first and second ones of the respective pluralities of

drive currents are independently selectable and at least one of the first and second pluralities of drive currents include more than two drive current levels, and wherein the first plurality of drive currents comprises a number  $n$  of drive current levels including zero, and wherein a duration of one phase is approximately  $n$  times a duration of the other phase.

Claim 2 (Canceled)

3. (Previously Presented) A device as claimed in claim 1, wherein  $n$  is 8.

4. (Previously Presented) A device as claimed in claim 1, wherein the first plurality of drive currents is the same as the second plurality of drive currents.

5. (Previously Presented) A device as claimed in claim 1, wherein the first plurality of drive currents comprises a first number  $n$  of drive current levels for providing the lowest  $n$  non-zero brightness levels, and the second plurality of drive currents

comprises a second number  $m$  of non-zero drive current levels for providing the highest  $m$  brightness levels, where  $n+m$  is the total number of brightness levels.

6. (Previously Presented) A device as claimed in claim 1, wherein each pixel comprises a drive transistor, a storage capacitor for storing a gate voltage of the drive transistor and an address transistor for switching a data voltage to the gate of the drive transistor during an addressing phase.

7. (Previously Presented) A portable electronic device comprising a display device as claimed in claim 1.

8. (Currently Amended) A method of driving an electroluminescent (EL) display device comprising an array of display pixels, each display pixel comprising an EL display element and a current source circuit for driving a current through the EL display voltage in dependence on a data voltage, the method comprising the acts of:

in a first phase having a first duration, driving a first one

of a first plurality of drive currents through the EL display element; and

in a second phase having a second duration, different to the first duration, driving a second one of a second plurality of drive currents through the EL display element, wherein the first and second ones of the plurality of drive currents are selected to provide a desired combined EL display element output, and at least one of the first and second pluralities of drive currents includes more than two drive current levels, and wherein the plurality of drive currents comprises a number  $n$  of drive levels, and wherein a duration of one phase is approximately  $n$  times a duration of the other phase.

Claim 9 (Canceled)

10. (Previously Presented) A method as claimed in claim 8, wherein  $n$  is 8.

11. (Previously Presented) A method as claimed in claim 8, wherein the first plurality of drive currents is the same as the

second plurality of drive currents.

12. (Previously Presented) A method as claimed in claim 8, wherein the first plurality of drive currents comprises a first number  $n$  of non-zero drive current levels for providing the lowest  $n$  brightness levels excluding zero, and the second plurality of drive currents comprises a second number  $m$  of non-zero drive current levels for providing the highest  $m$  brightness levels, where  $n+m$  is the total number of non-zero brightness levels.

13. (Previously Presented) A device as claimed in claim 1, wherein the first plurality of drive currents is the same as the second plurality of drive currents.

14. (Previously Presented) A device as claimed in claim 1, wherein each pixel comprises a drive transistor, a storage capacitor for storing a gate voltage of the drive transistor and an address transistor for switching a data voltage to the gate of the drive transistor during an addressing phase.

15.(New) The EL display device of claim 1, wherein only the first phase is used to provide lowest n brightness levels.

16.(New) The EL display device of claim 15, wherein only the second phase is used to provide brightness levels higher than the lowest n brightness levels.

17.(New) The EL display device of claim 1, wherein the first phase is used for higher resolution and the second phase is used for lower resolution.

18.(New) The EL display device of claim 1, wherein a highest brightness level is provided by turning off drive currents during the first phase, and increasing a peak drive current in the second phase to a higher level than an allowable peak drive current in the first phase.

19.(New) The EL display device of claim 1, wherein all the display pixels are addressed twice within each frame period.

20.(New) The EL display device of claim 1, wherein all the display pixels are addressed once row by row during the first phase, and are re-addressed in a same row by row order during the second phase.

21.(New) The method of claim 8, further comprising the acts of:

using only the first phase to provide lowest n brightness levels; and

using only the second phase to provide brightness levels higher than the lowest n brightness levels.

22.(New) The method of claim, further comprising the act of providing a highest brightness level by turning off drive currents during the first phase, and increasing a peak drive current in the second phase to a higher level than an allowable peak drive current in the first phase.